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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/547,680	09/02/2005	Heinrich Hanisch	66489-067	9000
25769 7590 12/22/2008 DYKEMA GOSSETT PLLC FRANKLIN SQUARE, THIRD FLOOR WEST 1300 I STREET, NW WASHINGTON, DC 20005				
EXAMINER				
EIDE, HEIDI MARIE				
ART UNIT		PAPER NUMBER		
3732				
MAIL DATE		DELIVERY MODE		
12/22/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/547,680

Applicant(s)

HANISCH ET AL

Examiner

HEIDI M. EIDE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-28 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 17-28 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 02 September 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/5508)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the mesial/lingual, mesial/buccal, distal/lingual and distal/buccal corners must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
2. Color photographs and color drawings are not accepted unless a petition filed under 37 CFR 1.84(a)(2) is granted. Any such petition must be accompanied by the

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appropriate fee set forth in 37 CFR 1.17(h), three sets of color drawings or color photographs, as appropriate, and, unless already present, an amendment to include the following language as the first paragraph of the brief description of the drawings section of the specification:

The patent or application file contains at least one drawing executed in color. Copies of this patent or patent application publication with color drawing(s) will be provided by the Office upon request and payment of the necessary fee.

Color photographs will be accepted if the conditions for accepting color drawings and black and white photographs have been satisfied. See 37 CFR 1.84(b)(2).

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 17-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The applicant has amended each of the independent claims to include the limitation of a computer having a memory and software in the memory, however, support of this limitation, specifically the software stored in the memory of the computer, cannot be found in the originally filed disclosure.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 17-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In each of the independent claims, the applicant has amended the claims to include the limitation "wherein said region comprising a computer having a memory and software in said memory which enables selecting..." It is unclear what the applicant is trying to claim. It appears that the applicant is claiming that the region comprises the computer with the memory and software

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 17-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baba 6,049,743.
2. Re claim 17, Baba teaches a device for the selection of a region for a dental restoration body depicted in 3D representation, in which at least parts of the regional boundary are in the form of dentally specific lines wherein the region is selected by selecting, in the 3D representation displayed, dentally specific lines or a preparation border and the selected line selects the region completely according to the following assignments: preparation border ML; the region extends from the preparation border to

the center of the occlusal surface, equator 15; the region lies between the preparation border and the marginal crest, marginal crest 14; the region extends from the equator to the center of the occlusal surface, fissure; the entire occlusal surface is selected as the region, this being delimited by the marginal crest as illustrated in figs. 4A-4B (col. 8, ll. 3-11). Baba further teaches a computer having software and memory 3 (col. 7, ll. 24-29, l. 47). Baba does not specifically teach the software is stored in the memory, however, it was well known at the time of the invention that software was stored on the memory of the computer.

3. Re claim 18, Baba teaches the device wherein the dentally specific lines used are equator 15, the marginal crest 14 and the dentally specific points used are the position of one or more cusp peaks 11 as illustrated in figs. 4A-4B (col. 7, ll. 65-67, col. 8, ll. 1-3).

4. Re claim 19, Baba teaches the device wherein each of the dentally specific lines are divided into four parts representing the mesial/lingual, mesial/buccal, distal/lingual and distal/buccal corners of the tooth respectively as illustrated in fig. 4B.

5. Re claim 20, Baba teaches the device wherein the selected part of the line selects that half of the tooth in which the region lies (col. 8, ll. 7-22).

6. Re claim 21, Baba teaches the device for the selection of a region of a dental restoration body depicted in 3D representation in which at least parts of the regional boundary are in the form of dentally specific lines wherein the region is selected by selecting in the 3D representation displayed, dentally specific points 11 and the selection of a dentally specific point representing the position of a cusp peak makes it

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possible to select the region of the corresponding cusp up to its border and the lower limit of the region is formed by the equator 15 as illustrated in figs. 4A-4B (col. 8, ll. 7-22). Baba further teaches a computer having software and memory 3 (col. 7, ll. 24-29, l. 47). Baba does not specifically teach the software is stored in the memory, however, it was well known at the time of the invention that software was stored on the memory of the computer.

7. Re claim 22, Baba teaches the device wherein instead of selecting the displayed lines or points, a region of the displayed surface is selected which is unambiguously assigned to the region to be selected, however a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

8. Re claim 23, Baba teaches the device wherein the selected region is shown in a distinguishable fashion as illustrated in fig. 5 (col. 8, ll. 7-22).

9. Re claim 24, Baba teaches the device wherein comparative means are provided for geometrical data of the selected region (col. 7, ll. 14-17).

10. Re claim 25, Baba teaches the device wherein the selected region can be processed with the aid of a design tool of a CAD system (col. 7, ll. 24-26).

11. Re claim 26, Baba does not specifically teach the device wherein the tool for modifying a region leaves the regional boundaries unchanged and a continuous increase in modification taking place up to the point requiring the greatest degree of

modification, however, it would have been obvious to one having ordinary skill in the art at the time of the invention that the modifications made are user dependent and a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

12. Re claim 27, Baba does not specifically teach the device wherein the point of greatest modification lies of a dentally specific line or on a dentally specific point, however, it would have been obvious to one having ordinary skill in the art at the time of the invention that the modifications made are user dependent and a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

13. Re claim 28, Baba teaches a method of selecting a region of a dental restoration body depicted as a 3D representation in which to the selected region, regional boundaries are assigned which are at least in part in the form of dentally specific lines wherein the selection of the region is effected by selecting a dentally specific line 14/15 or a dentally specific point 11 or a preparation border ML associated with the region to be selected as illustrated in fig. 4A-4B (col. 8, ll. 7-22). Baba further teaches a computer having software and memory 3 (col. 7, ll. 24-29, l. 47). Baba does not

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specifically teach the software is stored in the memory, however, it was well known at the time of the invention that software was stored on the memory of the computer.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-15 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 20-28, 30 and 32-34 of U.S. Patent No. 6,524,101. Although the conflicting claims are not identical, they are not patentably distinct from each other because the differences would have been obvious matters of design choice to someone having ordinary skill in the art at the time of the invention.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HEIDI M. EIDE whose telephone number is (571)270-3081. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached on 571-272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Heidi Eide
Examiner
Art Unit 3732

/John J Wilson/
Primary Examiner
Art Unit 3732

/Heidi M Eide/
Examiner, Art Unit 3732

12/16/08